

### **Amendments to the Claims:**

The listing of claims below will replace all prior versions and listings of claims in the application. The changes to currently amended claims are shown using strikethrough to identify deleted material and underlining to identify added material.

### **Listing of Claims:**

1-19. (canceled)

20. (Currently Amended) A method of identifying N-terminal proBNP in a sample comprising:

detecting a complex of the N-terminal proBNP, a first antibody, and a second antibody; wherein

a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml of the sample;

the first antibody is specific to a first epitope of the N-terminal proBNP;

the second antibody is specific to a second epitope of the N-terminal proBNP; and

the first epitope and the second epitope are different.

21. (Previously Added) The method of claim 20, wherein at least one of the first and the second antibodies comprises a label, and wherein the method further comprises detecting a signal emitted from the label.

22. (Previously Added) The method of claim 20 wherein the first and the second antibodies bind simultaneously to the N-terminal proBNP.

23. (Previously Added) The method of claim 20 wherein the detecting is performed by a heterogeneous test procedure.

24. (Previously Added) The method of claim 21 wherein the detecting is performed by a heterogeneous test procedure.

25. (Previously Added) The method of claim 22 wherein the detecting is performed by a heterogeneous test procedure.

26. (Previously Added) The method of claim 23 wherein the test procedure involves a sandwich assay.

27. (Previously Added) The method of claim 24 wherein the test procedure involves a sandwich assay.

28. (Previously Added) The method of claim 25 wherein the test procedure involves a sandwich assay.

29. (Previously Added) The method of claim 20 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

30. (Previously Added) The method of claim 21 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

31. (Previously Added) The method of claim 22 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

32. (Previously Added) The method of claim 23 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

33. (Previously Added) The method of claim 24 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

34. (Previously Added) The method of claim 25 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

35. (Previously Added) The method of claim 26 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

36. (Previously Added) The method of claim 27 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

37. (Previously Added) The method of claim 28 wherein a lower detection limit for the N-terminal proBNP is less than 1 fmol/ml.

38. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 20; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

39. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 21; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

40. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 22; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

41. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 23; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

42. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 24; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

43. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 25; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

44. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 26; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

45. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study using with the method of claim 27; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

46. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study using with the method of claim 28; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

47. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 29; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

48. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 30; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

49. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 31; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

50. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 32; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

51. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 33; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.



52. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 34; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

53. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 35; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

54. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 36; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

55. (Currently Amended) A method of differentiating a sample taken from a healthy patient and a sample taken from a patient with a type of heart failure, comprising:

identifying an amount of N-terminal proBNP in a sample under study ~~using~~ with the method of claim 37; and

correlating the amount of N-terminal proBNP identified in the sample under study with a level of N-terminal proBNP characteristic of a healthy patient or a patient with a type of heart failure;

wherein the type of heart failure is selected from the group consisting of NYHA Class I, NYHA Class II, NYHA Class III, and NYHA Class IV.

56. (Previously Added) The method of claim 38 wherein the type of heart failure is NYHA Class I.

57. (Previously Added) The method of claim 39 wherein the type of heart failure is NYHA Class I.

58. (Previously Added) The method of claim 40 wherein the type of heart failure is NYHA Class I.

59. (Previously Added) The method of claim 41 wherein the type of heart failure is NYHA Class I.

60. (Previously Added) The method of claim 42 wherein the type of heart failure is NYHA Class I.

61. (Previously Added) The method of claim 43 wherein the type of heart failure is NYHA Class I.

62. (Previously Added) The method of claim 44 wherein the type of heart failure is NYHA Class I.

63. (Previously Added) The method of claim 45 wherein the type of heart failure is NYHA Class I.

64. (Previously Added) The method of claim 46 wherein the type of heart failure is NYHA Class I.

65. (Previously Added) The method of claim 47 wherein the type of heart failure is NYHA Class I.

66. (Previously Added) The method of claim 48 wherein the type of heart failure is NYHA Class I.

67. (Previously Added) The method of claim 49 wherein the type of heart failure is NYHA Class I.

68. (Previously Added) The method of claim 50 wherein the type of heart failure is NYHA Class I.

69. (Previously Added) The method of claim 51 wherein the type of heart failure is NYHA Class I.

70. (Previously Added) The method of claim 52 wherein the type of heart failure is NYHA Class I.

71. (Previously Added) The method of claim 53 wherein the type of heart failure is NYHA Class I.

72. (Previously Added) The method of claim 54 wherein the type of heart failure is NYHA Class I.

73. (Previously Added) The method of claim 55 wherein the type of heart failure is NYHA Class I.

74. (Cancelled)

75. (Previously Added) The method of claim 20 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

76. (Previously Added) The method of claim 21 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

77. (Previously Added) The method of claim 22 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

78. (Previously Added) The method of claim 23 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

79. (Previously Added) The method of claim 24 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

80. (Previously Added) The method of claim 25 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

81. (Previously Added) The method of claim 26 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

82. (Previously Added) The method of claim 27 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

83. (Previously Added) The method of claim 28 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

84. (Previously Added) The method of claim 29 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

85. (Previously Added) The method of claim 30 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

86. (Previously Added) The method of claim 31 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

87. (Previously Added) The method of claim 32 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

88. (Previously Added) The method of claim 33 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

89. (Previously Added) The method of claim 34 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

90. (Previously Added) The method of claim 35 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

91. (Previously Added) The method of claim 36 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

92. (Previously Added) The method of claim 37 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

93. (Previously Added) The method of claim 38 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

94. (Previously Added) The method of claim 39 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

95. (Previously Added) The method of claim 40 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

96. (Previously Added) The method of claim 41 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

97. (Previously Added) The method of claim 42 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

98. (Previously Added) The method of claim 43 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

99. (Previously Added) The method of claim 44 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

100. (Previously Added) The method of claim 45 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

101. (Previously Added) The method of claim 46 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

102. (Previously Added) The method of claim 47 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

103. (Previously Added) The method of claim 48 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

104. (Previously Added) The method of claim 49 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

105. (Previously Added) The method of claim 50 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

106. (Previously Added) The method of claim 51 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

107. (Previously Added) The method of claim 52 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

108. (Previously Added) The method of claim 53 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.



109. (Previously Added) The method of claim 54 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

110. (Previously Added) The method of claim 55 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

111. (Previously Added) The method of claim 56 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

112. (Previously Added) The method of claim 57 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

113. (Previously Added) The method of claim 58 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

114. (Previously Added) The method of claim 59 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

115. (Previously Added) The method of claim 60 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

116. (Previously Added) The method of claim 61 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

117. (Previously Added) The method of claim 62 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

118. (Previously Added) The method of claim 63 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

119. (Previously Added) The method of claim 64 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

120. (Previously Added) The method of claim 65 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

121. (Previously Added) The method of claim 66 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

122. (Previously Added) The method of claim 67 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

123. (Previously Added) The method of claim 68 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

124. (Previously Added) The method of claim 69 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

125. (Previously Added) The method of claim 70 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

126. (Previously Added) The method of claim 71 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

127. (Previously Added) The method of claim 72 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

128. (Previously Added) The method of claim 73 further comprising quantifying the N-terminal proBNP identified in the sample against a standard comprised of recombinant N-terminal proBNP.

129. (Currently Amended) A method of producing antibodies against N-terminal proBNP comprising:

immunizing an organism with recombinant N-terminal proBNP, such that the organism produces antibodies; and  
isolating the antibodies from the organism.

130. (Previously Added) An antibody against recombinant N-terminal proBNP.

131. (Previously Added) The antibody of claim 130 wherein the antibody specifically binds N-terminal proBNP in a range between amino acids 10 to 66.

132. (Previously Added) An antibody against recombinant N-terminal proBNP produced by immunizing an organism with recombinant N-terminal proBNP.

133. (Previously Added) The antibody of claim 132 wherein the antibody specifically binds N-terminal proBNP in a range between amino acids 10 to 66.

134. (Previously Added) The antibody of claim 130 produced by a cell line selected from the group consisting of M 10.1.11, M 13.4.14, and a combination thereof.

135. (Previously Added) The antibody of claim 131 produced by a cell line selected from the group consisting of M 10.1.11, M 13.4.14, and a combination thereof.

136. (Previously Added) An antibody against recombinant N-terminal proBNP produced by immunizing an organism with recombinant N-terminal proBNP, wherein the antibody thus produced is equivalent to an antibody against recombinant N-terminal proBNP produced by a cell line selected from the group consisting of M 10.1.11, M 13.4.14, and a combination thereof.

137. (Previously Added) Cell line M 10.1.11.

138. (Previously Added) Cell line M 13.4.14.

139. (Previously Added) A method of producing polyclonal antibodies against recombinant N-terminal proBNP comprising:

- immunizing an organism with recombinant N-terminal proBNP;
- isolating the antibodies from the organism;
- screening the antibodies for reactive epitopes; and
- purifying the antibodies by immunosorption.

140. (Currently Amended) A method of producing monoclonal antibodies against recombinant N-terminal proBNP comprising:

- immunizing an organism with recombinant N-terminal proBNP;  
fusing cells obtained from the organism with myeloma cells to produce  
hybrid cells; and
- selecting clones of the hybrid cells according to reactivity ~~between~~  
~~the antibodies and~~ with native N-terminal proBNP in different pools of  
patient sera.
141. (New) A method of identifying N-terminal proBNP in a sample comprising:  
binding a first antibody to the N-terminal proBNP;  
binding a second antibody to the N-terminal proBNP; and  
detecting a complex of the N-terminal proBNP, a the first antibody, and a  
the second antibody; wherein
- a lower detection limit for the N-terminal proBNP is less than 1  
fmol/ml of the sample;
  - the first antibody is specific to a first epitope of the N-terminal  
proBNP;
  - the second antibody is specific to a second epitope of the N-  
terminal proBNP;
  - the first antibody and the second antibody bind simultaneously to  
the N-terminal proBNP; and
  - the first epitope and the second epitope are different.

## **SUPPORT FOR AMENDMENTS**

Claim 74 is canceled without prejudice to its further prosecution in a continuation and/or divisional application.

The amendment to independent claim 20 is fully supported by the description in the specification (e.g., page 10, second full paragraph; page 25, second full paragraph; etc.).

The amendments to dependent claims 38-55 were made solely for stylistic reasons and are unrelated to patentability.

The amendments to independent claim 129 were made for clarification and are fully supported by the description in the specification (e.g., page 13, second full paragraph, etc.).

The amendments to claim 140 were made for clarification and are fully supported by the description in the specification (e.g., page 18, first full paragraph).

New claim 141 is fully supported by claim 22 and by the description in the specification (e.g., page 6, second full paragraph; page 9, first full paragraph; page 10, second full paragraph).

No new matter has been added. Upon entry of this Response, claims 20-73 and 75-141 are present and active in the application.